ABSTRACT OF THE DISCLOSURE

A method and system for optimizing routing traffic to a destination when multiple routes are available. A performance monitoring and inference component measures the performance of the available paths to a large set of subnetworks, and uses those measurements to infer the performance of all available paths to an even larger set of subnetworks. A routing optimization component uses a cost function that assigns a cost to a routing table based on information from the performance monitoring and inference component, as well as other path characteristics, and further uses a minimization methodology to find a routing table with a very low cost, as defined by the cost function. A BGP bridge takes the routing table generated by the routing optimization component and communicates that information to the routers using BGP, thereby ensuring that the routers will route traffic in accordance with the routing table.